Overview of the HL-7 Conference 9/11/00 – 9/14/00

Background:

Health Level Seven is one of several ANSI-accredited Standards Developing Organizations (SDOs) operating in the healthcare arena. Most SDOs produce standards (sometimes called specifications or protocols) for a particular healthcare domain such as pharmacy, medical devices, imaging or insurance (claims processing) transactions. Health Level Seven is used to exchange clinical and administrative data in the health care field.

The Application Protocol for Electronic Data Exchange in Healthcare Environments defines messages for data that are exchanged between applications based on a particular request or event. A message is comprised of multiple segments that must be sent in a particular order and which may or may not repeat. Segments are collections of data elements that typically share a common subject. The Health Level Seven Standard defines which data elements are to be sent, the data type and suggested length of each, and indicates whether the data element is required or optional and whether it may repeat (similar to X12). Like the segments, the fields must be sent in the order in which they are presented in the Standard. That way, both the sending and receiving systems know what data is expected, in what order, and in what format. The Health Level Standard also enables one system to query another for relevant information. For example, a physician's system could query the lab system for test results for a particular patient. Again, the information is ordered such that both systems know what data is expected to be exchanged

Members of Health Level Seven are known collectively as the Working Group, which is currently organized into 14 technical committees and 14 special interest groups. The technical committees are directly responsible for the content of the Standards. Special interest groups serve as a test bed for exploring new areas that may need coverage in HL7's published standards. The group which we are most interested in is the Claims Attachments Special Interest Group or CA-SIG. This group was renamed at this conference the Attachments Special Interest Group (A-SIG), as they will now be addressing attachments for TARs, claims etc.

Conference Expectations:

In attending the HL-7 conference, Delta had hoped to develop an understanding of how HL-7 operates and the format/syntax of the HL-7 segment, which is enveloped in the X12 275 transaction set. Delta also hoped to gain an understanding of what it takes to bring a new attachment to the workgroup, as well as the work required to have it added to the standard.

Attachment Workgroup (A-SIG):

The A-SIG workgroup was formed at HL-7 in August of 1997 after being approached by a Proof of Concept (POC) team in April 1997. The group set out to standardize the questions payers most frequently ask, and to develop and define standardized attachments for the healthcare industry. In analyzing the situation it was determined that Claim Status reason Codes would not be effective in requesting data from providers, and the decision was made to use the code set of Logical Observation Identifier Names and Codes (LOINC). The HL-7 members meet at least three times a year in various locations throughout North America.

Attendees:

The people attending the A-SIG workgroup were very interesting. They included members from health insurance payers (Blue Cross etc.), but an even larger number seemed to come from consulting groups who have a vested interest in thoroughly understanding what the SDO's develop. The third category of people present were the translator vendors and clearing houses.

This was a close knit, passionate group of people, that did not number more that twenty-five people at any given time during the workgroup sessions. This small group is responsible for setting attachment standards that the entire healthcare industry will have to follow (as is referenced in the EDI/Code set final rule and expected in the Attachment NPRM that is to be released later this year).

How attachments will work:

Attachments will be received in the X12 275 transaction set. The 275 transaction will serve only as an envelope to carry the HL-7 attachment. The portion of the 275 that contains the attachment is called the BIN segment. This segment contains only two sections. The first section is the length of the attachment and the second is the HL-7 data that makes up the attachment. The attachment will arrive in one of two fashions. The first will be when the 275 arrives with an 837 transaction. These two will then be linked up using the PWK (837) and TRN (275) segments, which contain the provider's control number. The second way will be when a 275 transaction is sent in response to a 277 transaction. The 277 transaction will contain the request for additional information, using LOINC codes, and the 275 will return the information using LOINC codes and data. The format for the second section of the 275 is to repeat the original question that was asked on the 277 by restating the LOINC code, and then state the answer using the appropriate LOINC codes and associated data.

Logical Observation Identifier Names and Codes:

LOINC codes are used to ask and answer questions. They function as an inverted tree. A single LOINC code may be used to request multiple pieces of information. When the information is returned it may be broken out in a more finite fashion using multiple LOINC codes, each a subset of the original request. The LOINC Consortium maintains these codes.

Current attachments:

There are currently six attachments that the A-SIG has developed. These attachments are:

- Ambulance
- Emergency Department
- Rehabilitative Services
- Lab Results
- Medications
- Clinical Notes.

The next attachments that the workgroup will be developing are Home Health, which is already underway and much progress has been made, and Durable Medical Equipment.

Developing new Attachments:

A very high level document was being developed to assist in the development of new attachments. The following steps were being discussed as the approach to take to submit a new attachment (DRAFT):

1. Research to determine if the information you are looking for is included in a another electronic transaction (837, 278 etc).
2. Complete a detailed attachment template. The template will contain examples to help aid in the completion of this form.
3. Describe what the purpose or need for any data elements, which may be required.

4. Gather all of the attachment data including supporting documentation and hard copies of all forms.
5. Bring the completed attachment spreadsheet and supporting information to the A-SIG workgroup.
6. The A-SIG will conduct outreach with the completed spreadsheet. This will always include the NUBC, NUCC and the ADA.
7. The A-SIG will form a work group and schedule teleconferences.
8. A consensus will be reached on the data elements required to successfully implement the attachment.
9. Finalize the spreadsheet and forward it to the LOINC Consortium.
10. Create booklets
11. Proceed through the HL-7 approval process.

See the attached Visio diagram to see the proposed attachment workflow once it reaches the A-SIG workgroup.

Issues of Concern:

- The A-SIG workgroup is a small volunteer organization that can only address a limited number of attachments at any given time.
- Currently only one person is administering the LOINC codes, and currently modifications to this code set happen rather quickly. There is concern that this may change if there is a huge influx of new the LOINC codes
- If any major changes or additions are made to the NPRM the release date will surly be impacted.
- The workgroup knows the attachments that have currently been defined are complete and that the entire industries needs have not yet been met, but they expect to resolve any open issues during the comment period and hope to have everything resolved prior to the release of the final rule.

Agenda for the following meeting:

The next agenda was not set, but one item, which was mentioned, was the need to address Medicaid's attachment needs.

Recommendations:

I would recommend attending the next meeting of HL-7 in January to ensure that Denti-Cal's needs are represented. Even if there is Medicare representation it does not appear that there will be anyone representing dental. Sheila Frank from HCFA stated the following to me at the conference "it is a small workgroup and the people that participate and bring their needs to the group generally get what they need if not what they want."